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SECURITY INFORMATION  
CENTRAL INTELLIGENCE AGENCY

## INFORMATION REPORT

REPORT NO.

25X1A

CD NO

COUNTRY

East Germany

DATE DISTR.

by 1953

SUBJECT

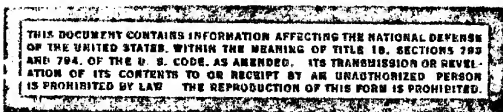
Schlieren Research on Combustion and Flow Processes  
at BTB

NO. OF PAGES

1

PLACE  
ACQUIREDNO. OF ENCLS.  
(LISTED BELOW)DATE OF  
INFO.SUPPLEMENT TO  
REPORT NO.

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THIS IS UNEVALUATED INFORMATION

SOURCE

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1. In early February 1953 the Berliner Technisches Bureau of GAG Transmasch obtained a large Schlieren device from VEB Carl Zeiss, Jena. There are now five Schlieren devices at BTB. A sixth is expected in March 1953.
2. All Schlieren devices so far drawn by BTB from Zeiss have remained at BTB. They are scheduled to be used there.
3. The Schlieren devices at BTB are to be used in the study of combustion processes and of flow processes. Study of these processes carried out so far has not been on a high level, mainly because of the inadequacy of testing equipment. Combustion processes have been investigated with the aid of single cylinder test stands (Einzyylinderpruefbock) with homosil glass windows built into the cylinder head; also with a combustion bomb provided with windows of homosil glass. The glass was imported from West Germany via West Berlin. For the investigation of flow processes, part-glass cylinders have been used with little success.
4. Cameras taking as many as 80,000 pictures per second have been used to record the processes studied in the above-mentioned testing equipment with the aid of Schlieren devices. BTB has now seven such cameras, of Western AG type. Two were bought in 1950, the rest in 1951.
5. To improve the present unsatisfactory status of Schlieren research, BTB is negotiating with the Schott firm in Jena for the delivery of better all-glass testing equipment. BTB expects to obtain from that firm all-glass cylinders to study flow processes in the near future. Schott has also agreed to construct an all-glass combustion bomb; so far the company has been unable to obtain the special glass needed.

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